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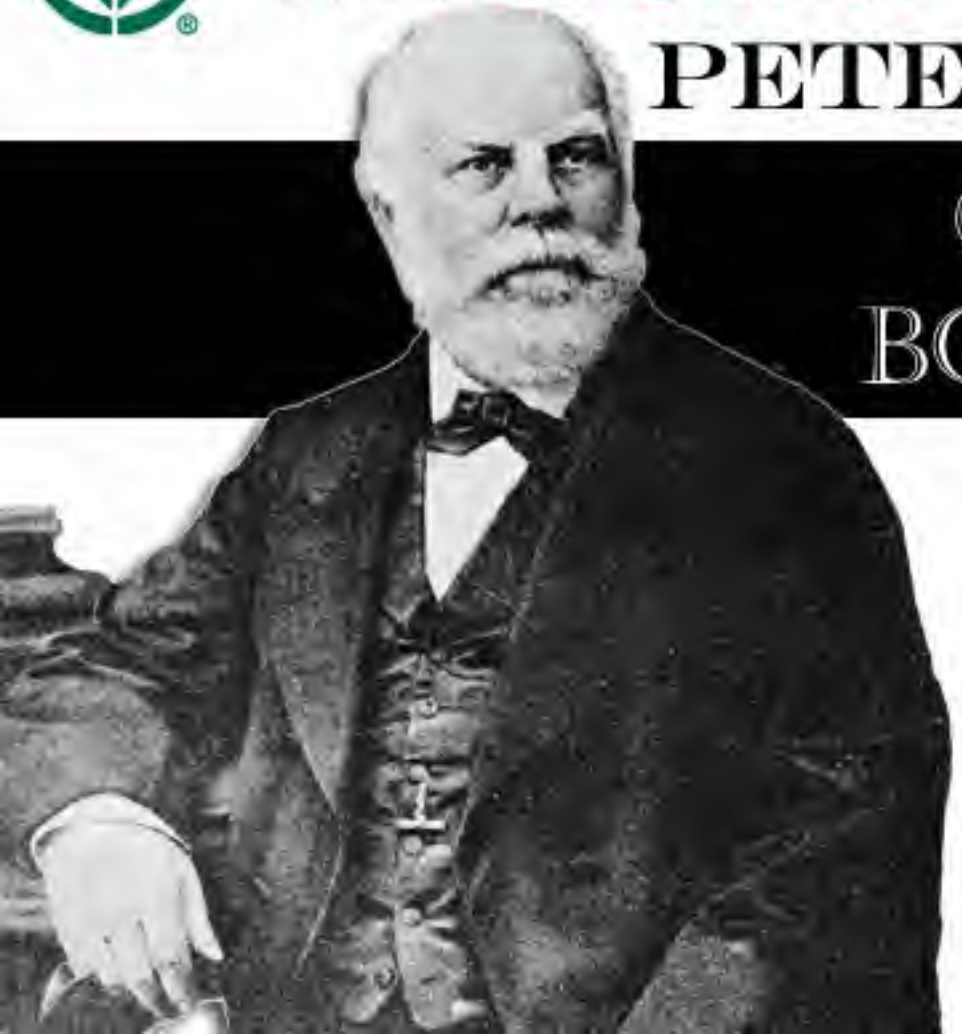
George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Picea Menziesii
forma angustifolia pendula
Black Butte near Mt Shasta, Calif
1424 Brewer

April 16 1871

X30

5-6

5-6 stoma only on upper side!

~~Picea grandis var~~
but certainly a Picea
branchlets slender
young cones slightly
pubescent.
J

Sierra Nevada

Aug 6 1879

no stomata on all

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Leitch & Corlies

DRUGGISTS

South West Corner Fifth and Market Streets

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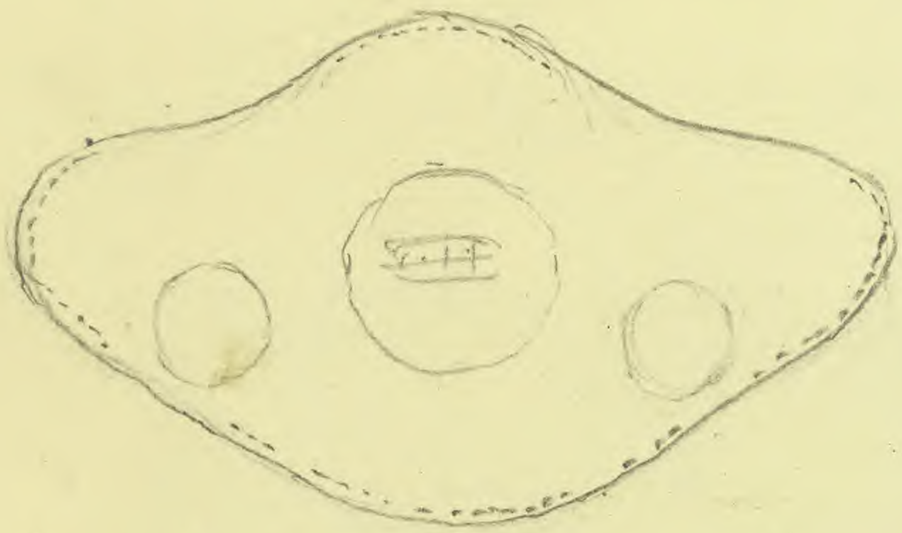
Picea Mengiesii

June 16 1878

Cascade Mts Lat 49° Hab Bot Card

Stomata 4-5 series on each upper side

1-4 " " " lower



very large dots below the
middle of leaf, not
extending towards tip
hypoderm on keels also
and (sometimes interrupted
on lower side.

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bHhC1

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"Picea Sitchensis"

June 16 1878

×30

Coult, Sargent, Cambridge — fourth, gray tree

hypoderm at angles
and all below.
none other above
no dents observed. none above nor below
middle of leaf
2 × 6-8 lines of stomata above
2 × 1-2 or none below.

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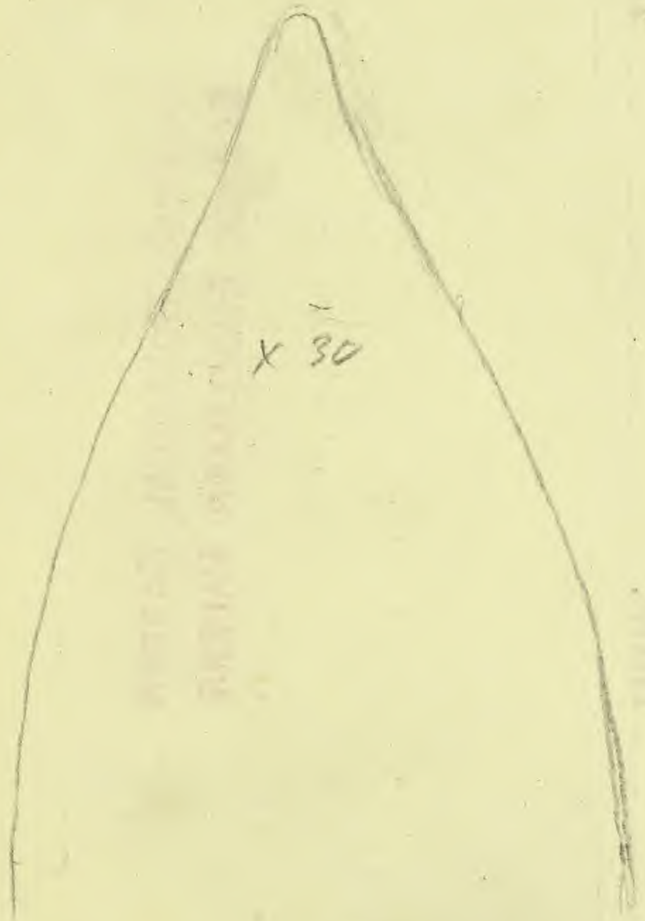
Picea Mariana
Mualarhka

May 3 1878

x 30



bundle of vessels much nearer the appex than the base side
hypodermis ribs below the vessels within the sheath
strong bundles of both kinds, strata slightly interrupted below
very few above

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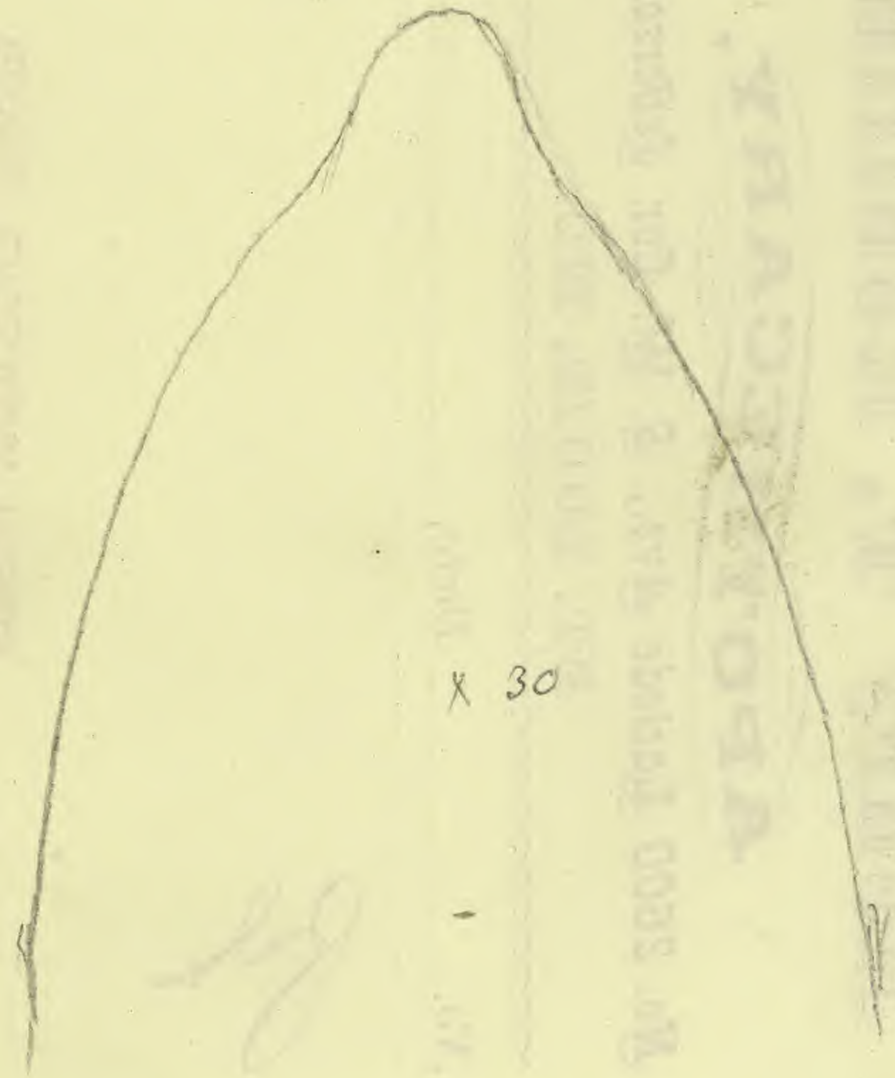
Pinca Mexicana
Oregon City, Col

May 3rd 1878

x 30

1 resinduct.
otter leaves of same tree
have no duct



X 30

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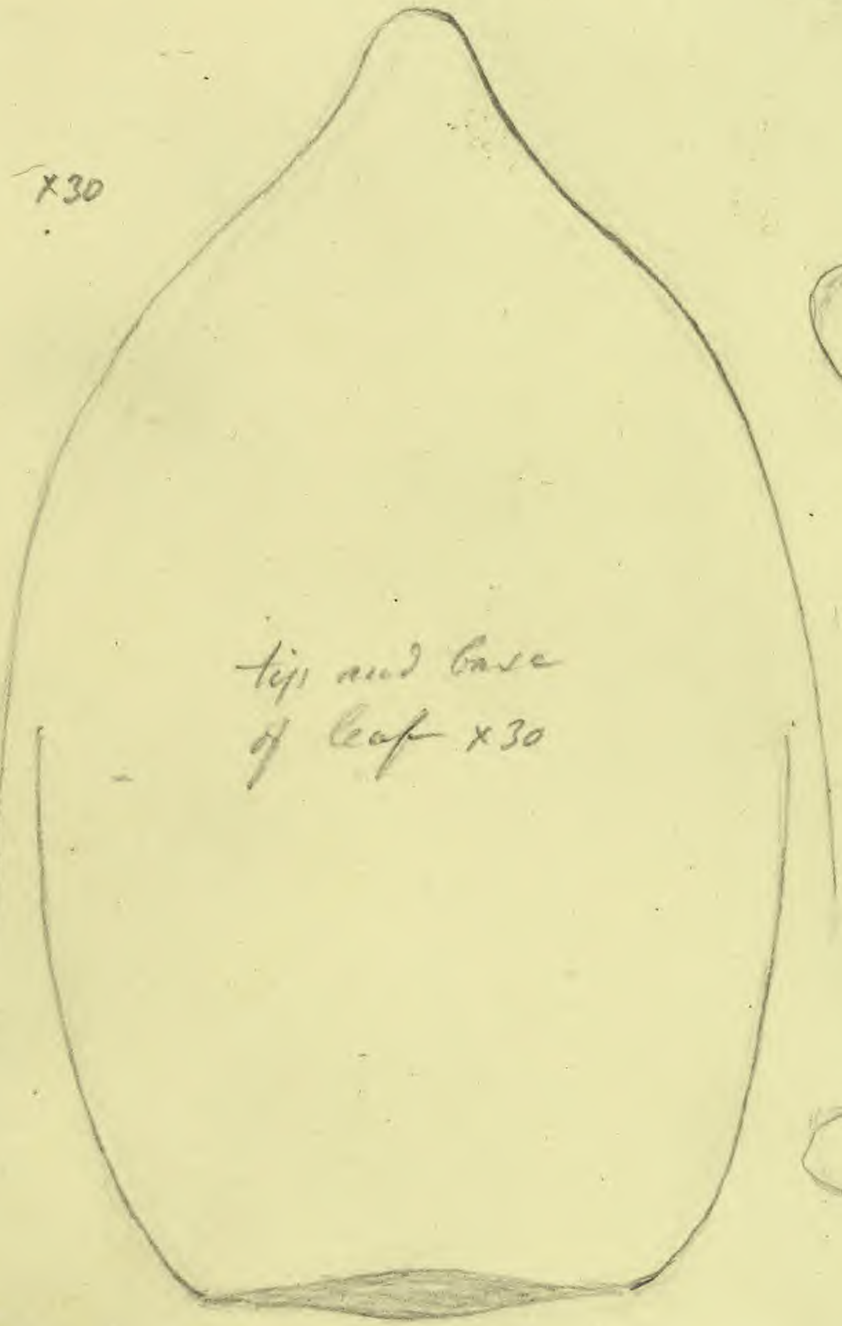
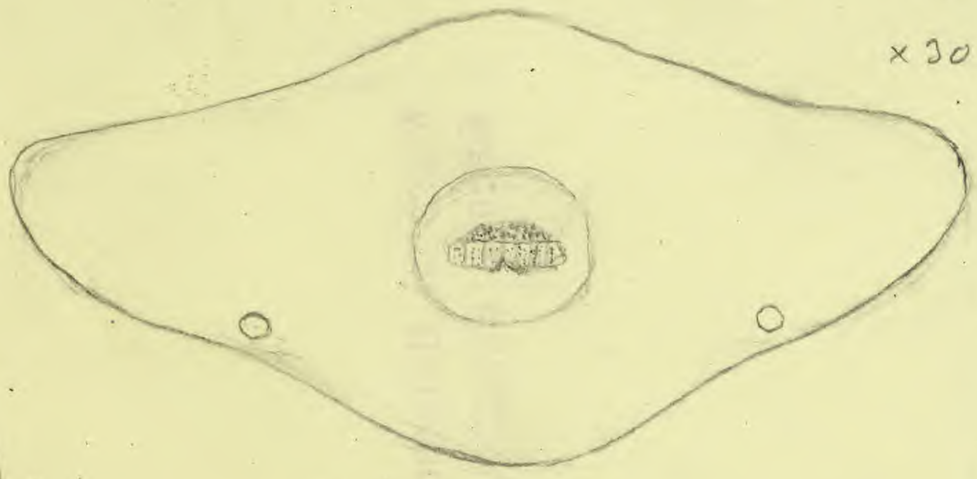
Pinus Menziesii
? Scarcest near Crescent City, California
April 16 • 1871
Brewer leg.

x30



tip and base of leaf x30



base of leaf x30

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"THE ROOT NO."
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A Menzies ii

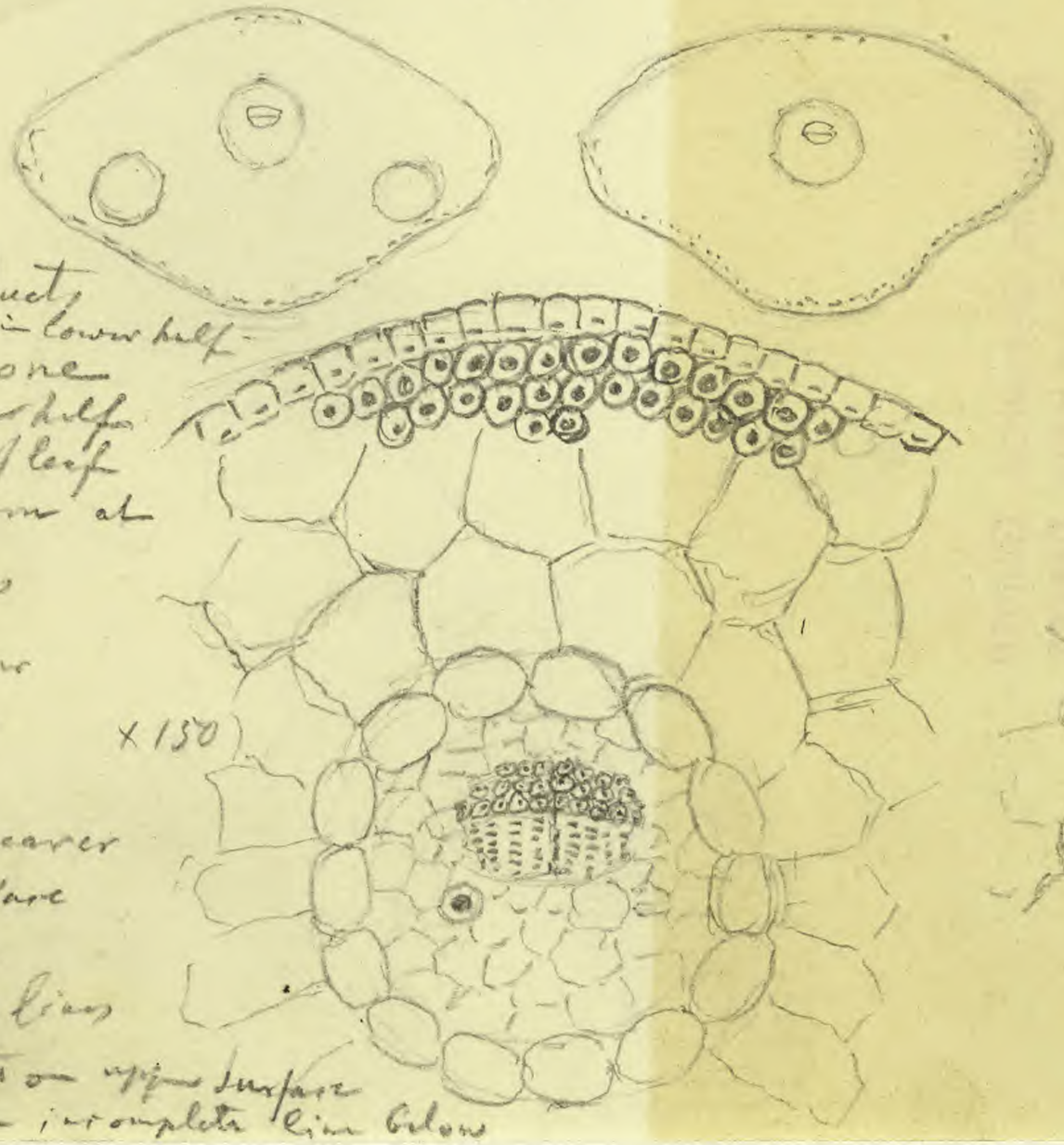
from Oregon, cult at J Hooper's

June 15 1878

fresh

×30

The ducts are only in
The lower half of the
leaf



large ducts
= lower half
or none
= upp half
of leaf
hypoderm at
4 angles
& lower
surface

×150

bundle nearer
upper surface

twice 6-7 lines
of stomata on upper surface
of one ; incomplete line below

×150

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Pinca Menziesii

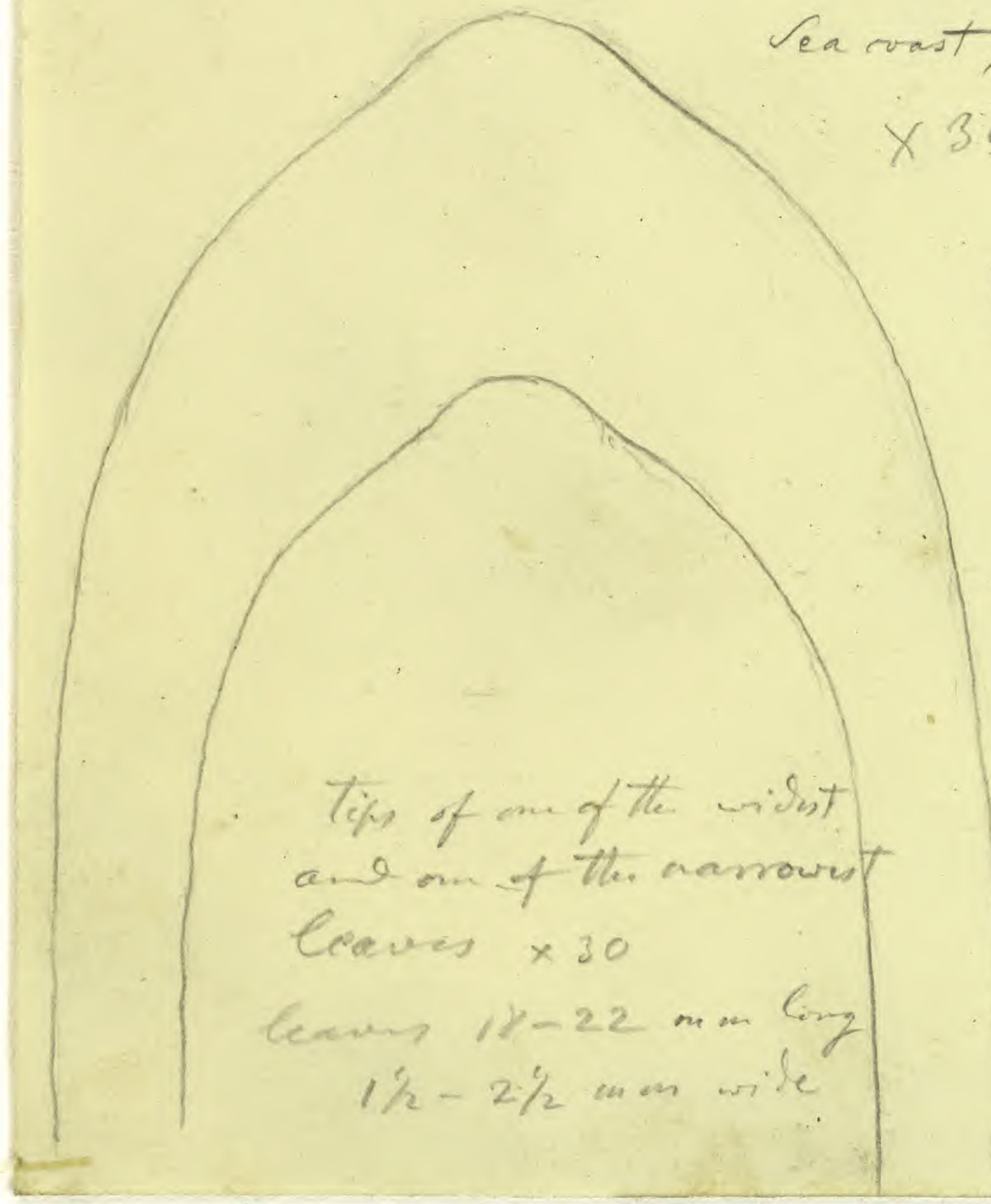
Sea coast, Califor

Crescent City

Prof Brewer

June 4 1871

X 30

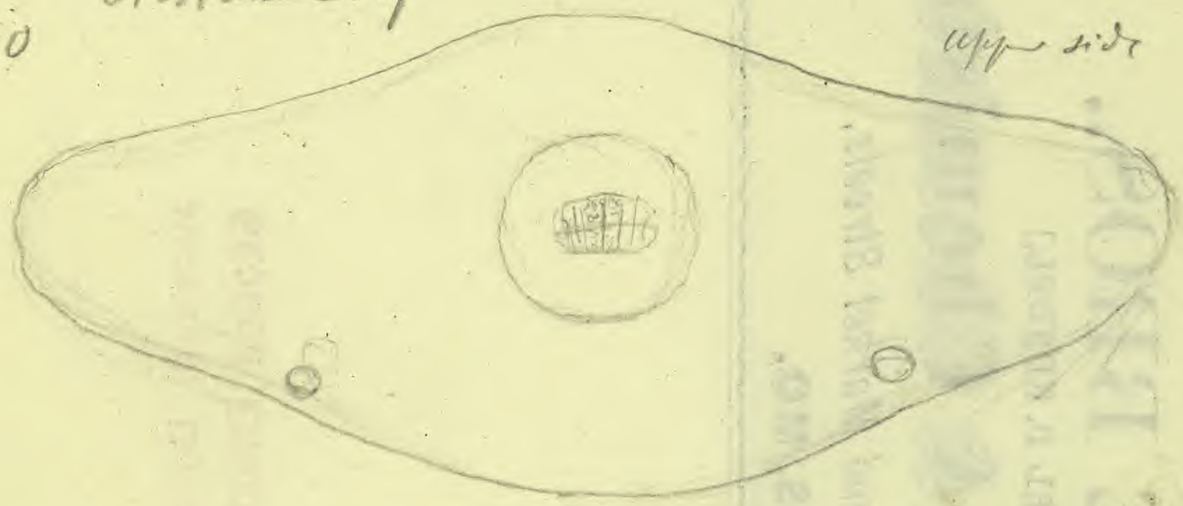


tips of one of the widest and one of the narrowest leaves x 30

leaves 18–22 m m long

1½ – 2½ m m wide

upper side



upper side

upper side of leaf white, full of stomata

under side without any, green

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g Tub

P. Stchens is

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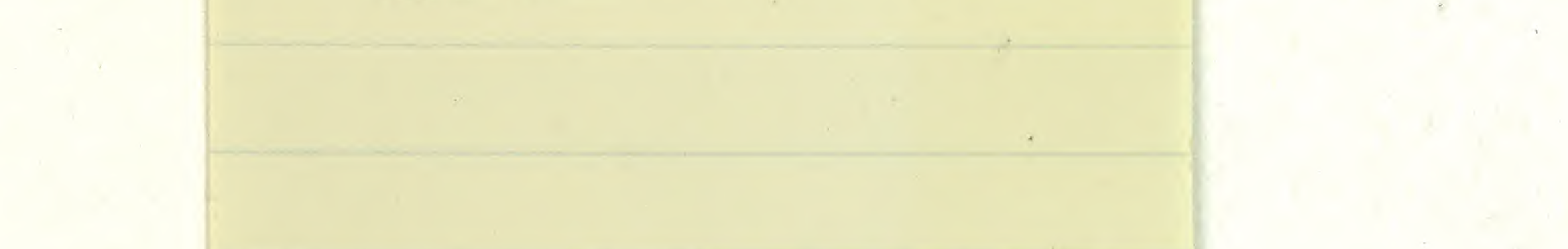

red in colour with the tips of the segments white; and Amaryllis Achilles, a larger flower than Acis but not so compact, brick-red, heavily shaded with crimson in the centre, and lighter in colour towards the tips of the segments. The same firm also received a Certificate for Calanthe Regnieri, a pretty species from Cochin China, with erect spikes of flowers, sepals and petals white or blush-tinted white, and the three-lobed labellum wholly rosy-lilac, all the lobes being rounded and the central one divided into two. Mr. B. S. Williams' bank consisted entirely of Primulas, his fine strains of purple and white and Chiswick Red. Messrs. Cannell & Son also received a Silver Medal for a group of admirably grown double Primulas, which, with a selection of fine named varieties from Messrs. James Carter & Co. and a collection from Chiswick, are commented upon in another place (see p. 218). From Swanley also came some flowering examples of the fine Cineraria March Past, and of another new variety named Victory, of a heavy claret ground colour shaded with violet, and in other respects quite the equal of the first-named. The Chairman exhibited a charming variety of Odontoglossum crispum, with white violet-shaded sepals and petals, with a few spots only on the lip; and Odontoglossum Scottii, in the way of a fine variety of O. Andersonianum, being a clear creamy-yellow in ground colour, heavily spotted and barred with dark brown. Messrs. Hugh Low & Co., Clapton, sent a fine pan of the nice little white-flowered Angræcum citratum, a species from Madagascar, with prettily arching spikes; and a white variety of the fine Phalænopsis leucorhoda, pure white, with the exception of some spots on the wings of the labellum, close to the column. This received the award of a certificate. A grandly flowered specimen of Cœlogyne cristata, measuring about 3 feet in diameter, came from P. Crowley, Esq., Waddon House, Croydon, and was awarded a Cultural Commendation. Odontoglossum crispum aureum magnificum, a prettily spotted yellow ground variety, of fine form, came from C. Dorman, Esq., Laurie Park, Sydenham, and was awarded the coveted certificate. From the collection of W. Vanner, Esq., Chislehurst, came a very large flowered variety of Dendrobium Wardianum, and a white variety of D. heterocarpum. A fine piece of Cattleya Trianæ, with numerous flowers of good size and specially rich in the colouring of the labellum, was shown by Mr. Heims, gr. to F. A. Philbrick, Esq., Q.C., together with a boldly spotted form of Odontoglossum Alexandræ. Mr. Lyon, gr. to Sir E. H. Scott, Bart.,

Netherlands, [illegible] defendant is also a nurseryman, carrying on business at Clapham, in the county of Surrey, for the purpose of recovering the sum of £84 odd, and the defendant claims by his counterclaim the sum of £250 for damages. The facts are these:—On August 28 and October 15, 1881, the plaintiffs sold and delivered to the defendant bulbs which amounted to the sum of £80 odd. The defendant admits the delivery of the bulbs, but that the price was not agreed to, and that the quality of the bulbs was not as contracted for, but that they were almost entirely useless, and the defendant further says that the bulbs were sold to him upon the terms that they were not to be paid for if they were deficient in quality. The defendant got by a sale £30 odd, which he is willing to give credit for. He by his counterclaim says he is entitled to £250 for damages through the great expense in trying to rear the bulbs, which were useless; and he says he has had to pay other people for flowers, so as to enable him to supply his customers, and that he also lost the profit. The plaintiffs, in answer to the defendant's counter-claim, deny that there was any warranty as that alleged in the counter-claim, but that the bulbs were of the quality agreed to be supplied, and they also deny that the defendant was put to any expense in trying to raise the bulbs, and the plaintiffs also denied that the defendant had to buy flowers, and that he lost any profit in respect of the roots in question; and the plaintiffs further say that the roots supplied were of good quality, and that if they were worthless, they were rendered so by the unskilful treatment of the defendant.

Mr. Murphy, Q.C., and Mr. C. E. Jones appeared for the plaintiffs; Mr. Kempe, Q.C., and Mr. Channell appeared for the defendant.

Witnesses were called on both sides to speak to the quality of the bulbs.

The plaintiffs' late manager in the course of his evidence said that the bulbs were carefully picked out, and were the best of that season's growth.

The defendant called a number of witnesses as to the quality of the bulbs, and one of them said that they were not good enough for his customers at Kensington. The learned counsel having addressed the jury for their respective clients, and read a number of letters that passed between the parties, the Judge summed up to the jury, and in the course of his summing-up left the following question to them—Were the goods of the best quality, according to the terms of the contract? If they were, then verdict for the plaintiffs for £85; if not, then verdict for the defendant; and then you must con-

the beginning of the week to 30.26 inches by 9 A.M. on the 5th, decreased to 29.86 inches by 9 A.M. on the 7th, increased to 29.88 inches by 3 P.M. on the same day, decreased to 29.60 inches by 3 P.M. on the 8th, increased to 29 83 inches by 3 P.M. on the 9th, and was 29.38 inches by the end of the week.

The mean reading for the week at the level of the sea was 29.88 inches, being 0.29 inch higher than last week, and 0.07 inch lower than the average of the week.

Temperature.—The highest temperature in the shade in the week was 52°, on the 8th; on the 7th the highest temperature was 43°. The mean of the seven high day temperatures was 48°

The lowest temperature in the shade in the week was 33°.9, on the 6th; on the 10th the lowest temperature was 43°. The mean of the seven lowest temperatures was 37°.9.

The greatest range of temperature in one day was 12°.5, on the 8th; the smallest was 5°, on the 10th. The mean of the seven daily ranges was 10°.1.

The mean temperatures were—on the 4th, 43°.1; on the 5th, 42°.2; on the 6th, 39°.3; on the 7th, 39°.7; on the 8th, 46°.3; on the 9th, 43°.6; and on the 10th, 46°.; and these were all above their averages by 4°2, 3°.2, 0°.2, 0°.7, 7°.2, 4°.5, and 7° respectively.

The mean temperature was 42°.9, being 2°.6 higher than last week, and 3°.9 above the average of the week.

The highest reading of a thermometer with blackened bulb in vacuo placed in the full rays of the sun was 97°.5, on the 9th. The mean of the seven readings was 77°.7.

The lowest reading of a minimum thermometer with its bulb placed on short grass, and exposed to the sky was 27°.2, on the 6th. The mean of the seven readings was 32°.7.

Rain.—Rain fell on four days, to the amount of 1.24 inch, of which 0.62 inch fell on the 8th and 0.40 inch fell on the 10th.

ENGLAND: *Temperature.*—During the week ending February 10 the highest temperatures were 55° at Truro, 52°.2 at Plymouth, and 52°.1 at Cambridge; the highest, at Bolton, was 46.6°, at Bradford 48°, and at Wolverhampton 48°.4. The general mean was 50°.5.

The lowest temperatures in the week were 32° at Truro and Cambridge, and 32°.8 at Bolton; the lowest temperature at Bristol was 36°.3, and at Plymouth and Brighton 36°. The general mean was 34°.1.

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FIG. 31.—A, DWARF BUTTER BEAN. B, SCARLET RADISH. C, CABBAGE LETTUCE. D, LONG VIOLET EGG-PLANT. E, PRICKLY CARDOON. F, PURPLE SPROUTING BROCCOLI. (SEE P. 220.)

were under a very heavy cloud, knowing that as the lawsuit with Her Majesty's Commissioners had gone against them, the Society was responsible for the costs—a sum of over £900—and as a consequence they were not last year able to balance their expenditure with their income; the expenses of the lawsuit had, however, been somewhat mitigated by an increase of £500 in miscellaneous receipts, but the Society was still left £379 to the bad. The Commissioners now being masters of the situation the Council naturally expected a considerable diminution in the number of Fellows, but had been agreeably surprised at the small number they had lost. The practical result of the altered condition of affairs was that they had lost fifteen life Fellows, and the number of Fellows paying four guineas a year had fallen from 449 to 427, but the number of Fellows paying two guineas had increased from 956 to 970. The Royal Commissioners for the Exhibition of 1851 having become entitled to the possession of the grounds, they had let the gardens for the year to the owing to the fine weather on the Bank Holidays. While the Fisheries Commissioners had granted personal privileges to Fellows of the Society, the Society had been unable to secure for its ticket-holders the same rights which, while it was itself in legal possession of the buildings and gardens, it extended to them. Fellows would be admitted to the opening ceremony of the exhibition on payment of 5*s*., the charge to the general public being one guinea, which admitted also for the season.

Mr. Guedalla seconded the adoption of the report, and in so doing asked for further information as to the position of the Society. Had the gardens been taken out of their hands entirely, or were Her Majesty's Commissioners only going to use them for six months every year?

The President remarked, that by the arrangements to which he had referred the Society would retain their standing at Kensington this year; and, as to the future, committees had been named by the Royal Commissioners of the Exhibition of 1851 and also by been paid. In some years the interest had been paid prior to such charges, and the Society had gone into debt for the purpose. He was glad to say that new Fellows continued to join in considerable numbers, and he looked forward with hope to the future.

The report was unanimously adopted, and the retiring officers were re-elected, vacancies in the Council being filled by the election of Sir C. Strickland, Sir P. Cunliffe Owen, and Colonel Beddome.

A vote of thanks to the President and other members of the Council for the able manner in which they had conducted the affairs of the Society through a critical period having been accorded, the proceedings terminated.

SCIENTIFIC COMMITTEE.—Sir J. D. Hooker, K.C.S.I., in the chair. Present Messrs. Grote, Mangles, Murray, Loder, Pascoe, Wilson, McLachlan, F.R.S., Glaisher, F.R.S., Dr. Lowe, Dr. Masters, F.R.S., and Rev. G. Henslow, Secretary. There was but little business before the

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Picea Schrenkiana Carr. 2nd ed.

Pinus Thunbergii Parl. Fl. Tosc. 4: 76

Carrière

Tsuga Mertensiana Gordon ed 2 p. 29
bark thin, dark Coloured much divided by
small longitudinal fissures, on old trees
but somewhat smooth on young ones

P. leiophylla Parry 845 with subtend com-
persistent old cones, sheaths persist 1 year,
leaves persist ~~till 3rd year~~ only 2 years
P. cembroides leaves fall ± 4th year

Conifers 631 Tufts or Sheaths
631.6. a form of Corymbosa, sheaths
round, with pyramidal styles — common
631/2 or Bonsai towards E. Rio Grande
near arroyos, base with old tufts
Gen Halepensis bracteis non Linn. Fl. Cupressus
sem reticulat non H. elongata Don. Dec 9. 130
Are all Halepensis seeds reticulate?

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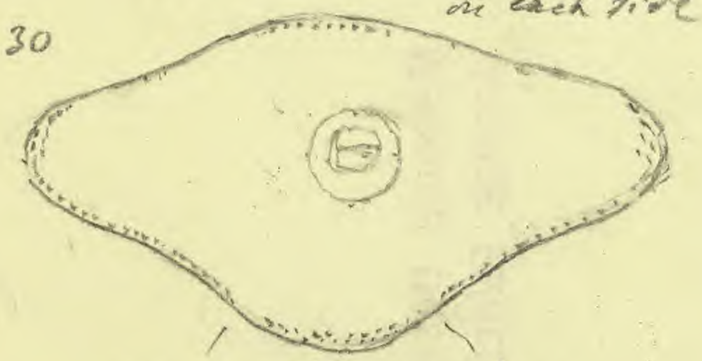
Pinus Sitchensis ! Bongard's type Aug 23 1879

Sabine or Herb Petersburg 1879

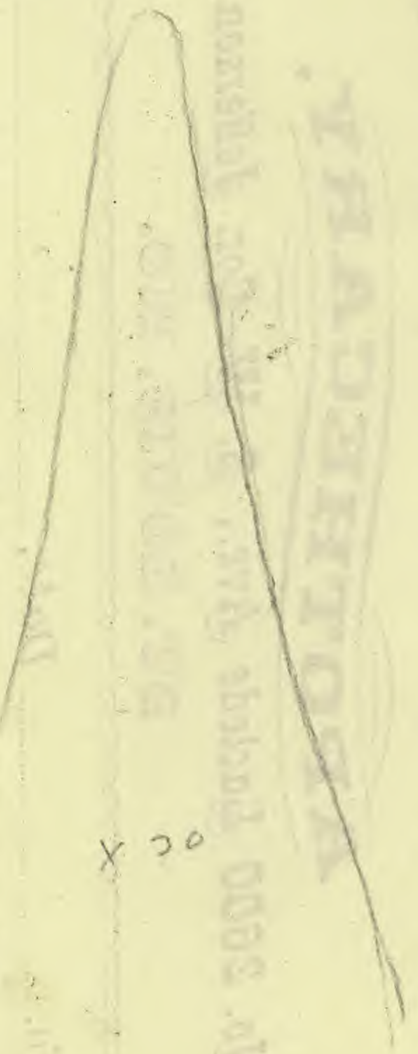
used 3/4 mm long
wing 5 mm long, 3/2 wide

7-8 series of stomata on each side

× 30



one or two series of stomata on each side of the keel
no ducts seen
hypoderm cells on all edges and below; rarely any above except on keel



× 30

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No. 3003 Locust Street.

bSh21

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H. J. Bongard.

Observations sur la Vegetation de l'île de Sitcha

par M. Bongard (Acta le 4 May 1831

(Mem. VI ser. Sc. math etc. t. II.) p. 169 – 177, 6 plates

p. 164. N: 146 Pinus Sitchensis, n sp.

foliis (solitariis) linearibus subtetragonis acuminatis
mucronatis; squamis coni oblongis obtusis tenuissime
denticulatis.

Rami teretes, lapsis foliis valde tuberculosi. Folia solitaria linearia, nervo medio utrinque prominulo subtetragona, acuminata, mucronata, basi truncata, 7–8 lin. longa, circa puncta angustiora. Strobili aggregati, erecti, vel oblongi, pollicem vel sesquipollicem longi. Squamae oblongae obtusae, apice subemarginatae, undulatae v. tenuissime et irregulariter denticulatae 5 lin. longae 3 lin. latae. Bracteae ovato-lanceolatae, acutae, squamam duplo circiter.

In herbario amiciss. Fischer asservatur varietas foliis minoribus latioribus, punctis crassioribus minusque acuminatis; squamis evidentius emarginatis magisque denticulatis, quam in ora occidentali Amer. septent. (Sandwich-Insul) ad. Merkius legit.

cambridge Sept 25 1879 [Verbatim et literatim]

NB. the bracts of the scales, half as long as the oblong scales themselves, characterize the species, though the cones are as small as in P. Engelmanni

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Bertrand 1874 p. 84

Pinea with flat leaves:

P. Pinaster has stomata only on upper side

P. Sabiniana stomata below

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distinguishes it from that species and points to Phellos as its closest ally or its parent, imbricaria not growing in that region. From Phellos it is distinguished by the form of the leaves, their thick down (in Phellos even the youngest leaves are almost glabrous) and less revolute margin in early youth, and by the larger acorn in the deeper cup bearing much larger and longer scales. If a hybrid, Phellos must be one of the parents; (which from its rarity, is most probable,) for the other we will find (and its too variable foliage) among the lobe-leaved Black-oaks of the its neighborhood, falcata, rubra or coccinea; while the sometimes falcate leaf-lobes of the first m. our tree may point to the first, and the frequency of the second in those localities & to this, the texture of the leaf as well as the form of the cup and its scales, appear to intermediate between the last coccinea and Phellos and coccinea exclude them

April 22, 1879
H. B. Parsons.

Picea alba with stiffer, more
divaricate, more pungent
leaves,
earlier development — buds
already swelling and often unfolding
very early in May developed.
Always glaborous

Picea nigra with less pungent,
more erect or even appressed
leaves
later development, buds show
no signs of development
by May 1st.
Not very early in getting
mostly pubescent, but
sometimes almost or even
entirely glaborous

12462

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
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